

**IN THE CLAIMS:**

*Kindly rewrite Claims 1-10 as follows and add claims 11-14, in accordance with 37 C.F.R. § 1.121:*

1. (Currently Amended) A method for producing a target substance, comprising:

A) culturing a microorganism *an Escherichia coli* strain in a medium to produce and cause accumulation of a target substance in the medium; and  
collecting the targetsaid substance from said medium,  
wherein the microorganism is constructed from a parent strain belonging to the  
genus Escherichia or Coryneform bacteria and having a respiratory chain pathway of high  
energy efficiency and a respiratory chain pathway of low energy efficiency as respiratory  
chain pathways, and  
wherein the microorganism *Escherichia coli* strain has an ability to produce and  
accumulate the target substance in the medium and is a mutant strain or a genetic  
recombinant strain having either one or both of the following characteristicshas been  
modified so to have a characteristic selected from the group consisting of:

(Ai) the enhanced activity of an enzyme of the respiratory chain pathway of high  
energy efficiency selected from the group consisting of *SexM* type oxidase, *bc1* complex,  
cytochrome *bo*-type oxidase and *NDH-1*, is enhancedwherein said activity is enhanced by  
increasing a copy number of a gene coding for said enzyme or by modifying an  
expression regulatory sequence of said gene,

(Bii) the deficient activity of an enzyme of the respiratory chain pathway of low  
energy efficiency selected from the group consisting of cytochrome *bd* type oxidase and  
*NDH-II*, is deficientwherein said activity is made deficient by disrupting a gene coding  
for said enzyme, and

(iii) combinations thereof,

wherein the target substance is selected from the group consisting of an L-amino acid and a nucleic acid.

2 - 5. (Canceled).

6. (Currently Amended) The method according to Claim 1, wherein said microorganism strain comprises enhanced *SexM* type oxidasecytochrome *bo*-type

oxidase activity and deficient NDH-II activity.

7. (Currently Amended) The method according to Claim 1, wherein ~~an enzyme of the respiratory chain pathway of high energy efficiency~~ said enhanced activity is cytochrome  $b_6$ - $b_6$ -type oxidase activity.

8 -10. (Canceled).

11. (New) The method according to claim 1, wherein said deficient activity is NDH-II activity.

12. (New) The method according to claim 1, wherein said target substance is L-lysine.

13. (New) The method according to claim 1, wherein said target substance is L-threonine.

14. (New) The method according to claim 1, wherein said target substance is L-phenylalanine.